CLAIMS:

49. A method of transmitting packets of data in a communication network comprising at least first to third stations, the method comprising the steps of:-

providing data packets to only the first station and sending a first number of the data packets from the first station to a second station;

~~subsequently providing data packets to both said first and~~ third station when the second station has at least one predefined parameter with respect to said first and third station;

identifying via said second station which of the first number of packets are correctly received by the second station from the first station; and

responsive to a signal from said second station sending a second number of data packets from the third station to said second station commencing with a packet identified in said signal as being required after the last correctly received packet received from the first station.

50. A method as claimed in claim 1, wherein said network comprises a common node connected to said first and third stations, said common node being arranged to transmit data packets to said first and third stations.

51. A method as claimed in any preceding claim including the step of acknowledging by the second station correct receipt of that data packet by the second station.

52. A method as claimed in any preceding claim, further comprising the steps of:

subsequent to said step of sending a second number of data packets providing data packets to only the third station.

53. A method as claimed in claim 4 further comprising the steps of:

providing data packets to only the third station in response

to said second station no longer having said at least one predefined parameter with respect to said first and third station.

54. A method as claimed in any preceding claim further comprising the steps of:

indicating to a common node that the second station is reachable via both of said first and third stations;

~~transmitting the same data packets from the common node to~~ data storage means in the first and third stations;

transmitting the said same data packets from at least one of data storage means in the first and third stations to said second station;

identifying a received packet at the third station and acknowledging receipt of that packet; and

removing said acknowledged packet from the data storage means in said third station.

55. A method as claimed in claim 1, wherein said predefined parameter is defined by the geographic position of the second station with respect to the first and third stations.

56. A method as claimed in claim 1, wherein said at least one predefined parameter is defined by at least one parameter of signals received from at least one of said first and third stations satisfying a predetermined criteria.

57. A method as claimed in claim 8, wherein said signal parameter is the power level of a signal received at the second station from at least one of said first and third stations.

58. A method as claimed in claim 8, wherein said signal parameter is the ratio of power level of signals received at the second station from the first and third stations.

59. A method as claimed in claim 8, wherein said signal parameter is the quality of the signal received at the second

station from at least one of said first and third stations.

40. A method as claimed in claim 8, wherein said signal parameter is the quantity of traffic associated with at least one of said first and third stations.

41. A method as claimed in claim 1, wherein said predefined parameter is the quality of signals associated with at least one of said first and third stations.

42. A method as claimed in claim 1, wherein said parameter is averaged over time before it is determined if said criteria is satisfied.

43. A method as claimed in claim 1, wherein said predefined parameter defines a handoff zone in which said first station hands off to said third station in that second station stops receiving data packets from said first station and starts receiving data packets from said third station.

44. A method as claimed in claim 15, wherein said handoff zone is surrounded on either side by a zone in which the second station receives data packets from a respective one of said first and third stations and said first and third stations are provided with the same data packets.

45. A method as claimed in any preceding claim, wherein when handoff takes place, said second station transmits a signal to the third station to advise the third station of the which packet or packets were received from the first station and said third station transmits the data packet identified as being required after the last packet to said second station.

46. A method as claimed in any preceding claim, wherein if said second station does not correctly receive a data packet, said second station requests retransmission of said data packet.

67. A method as claimed in claim 2 or 6 or any claim appended thereto, wherein the common node associates a unique number for each packet and the same data packets, each of which is associated with the unique number are transmitted from said common node to both of the first and third stations.

68. A method as claimed in claim 2 or 6 or any claim appended thereto, wherein the common node controls the removal of said identified data packet from the or each data storage means.

69 A method as claimed in claim 2 or 6 or any claim appended thereto, wherein said first station is in communication with a first node and the third station is in communication with a second node, said first and second nodes being in communication with said common node.

70. A method as claimed in claim 21, wherein the acknowledgement is forwarded to the common node by one of said first and second nodes and the common node advises the other of the first and second nodes that an acknowledgment has been received.

71. A method as claimed in claim 2 or 6, wherein the first station is connected to a first node and the third station is connected to a second node and one of the first and second nodes is arranged to be the common node and said acknowledgements are forwarded to the common node.

72. A method as claimed in any of claims 21 to 23 wherein the first and second nodes and/or the first and third stations are connected together.

73. A method as claimed in claim 2 or 6, wherein the first and third stations are connected to the common node via a network.

74. A method as claimed in claim 2 or 6 or any claim when appended thereto, wherein data storage means is provided in said

common node.

75. A method as claimed in any one of the preceding claims, wherein said communication network has a plurality of cells or areas and said second station is able to register with one or more cells or areas of said network at the same time.

76. A method as claimed in any preceding claim, wherein packets of data are forwarded to at least one of said first and third stations before a connection is made with said second station.

77. A system of transmitting packets of data in a communication network comprising:- first, second and third stations, wherein said first station only is provided initially with data packets and is arranged to send a first number of the data packets to the second station, subsequently data packets are provided to both said first and third station when the second station has at least one predefined parameter with respect to said first and third station and wherein the second station is arranged to identify which of the first number of packets it receives from the first station, and the third station is arranged to send a second number of data packets to the second station in response to a signal from said second station commencing with the data packet identified in said signal as being required after the last correctly received packet from the first station.

78. A system as claimed in claim 29, wherein said first and third stations comprise storage means for storing data packets prior to transmission to said second station.

79. A system as claimed in claim 30, wherein said storage means comprises a buffer.

80. A system as claimed in claim 29, 30 or 31 wherein the second station is arranged to determine the last packet correctly received by the second station from the first station and the third station is arranged to transmit the packet subsequent to

the last correctly received packet to the second station.

81. A system as claimed in any of claims 29 to 32, wherein the first and third stations are both provided with at least some of the same data packets for transmission to said second station.